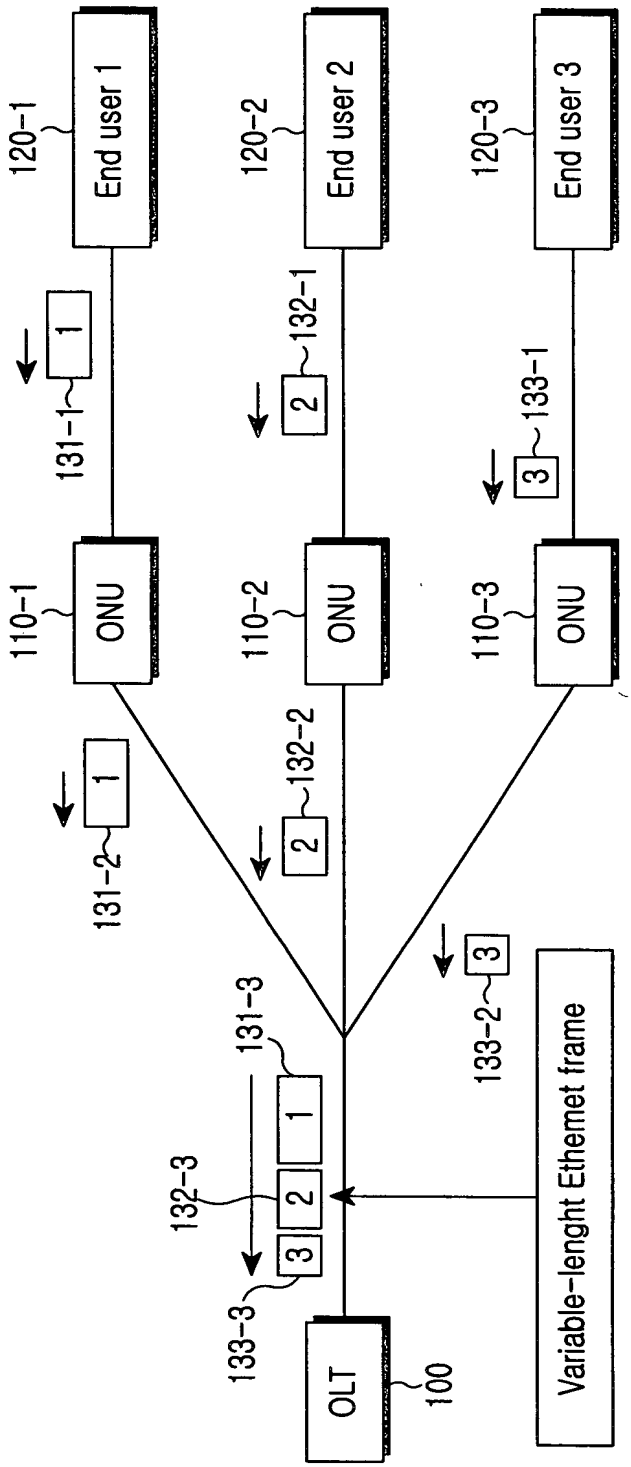
120-1
End user 1
120-2
End user 2
120-3
End user 3
131-1
132-1
133-1
110-1
ONU
110-2
ONU
110-3
ONU
131-2
132-2
133-2
131-3
132-3
133-3
OLT
100
Variable-lenght Ethemet frame

FIG.1

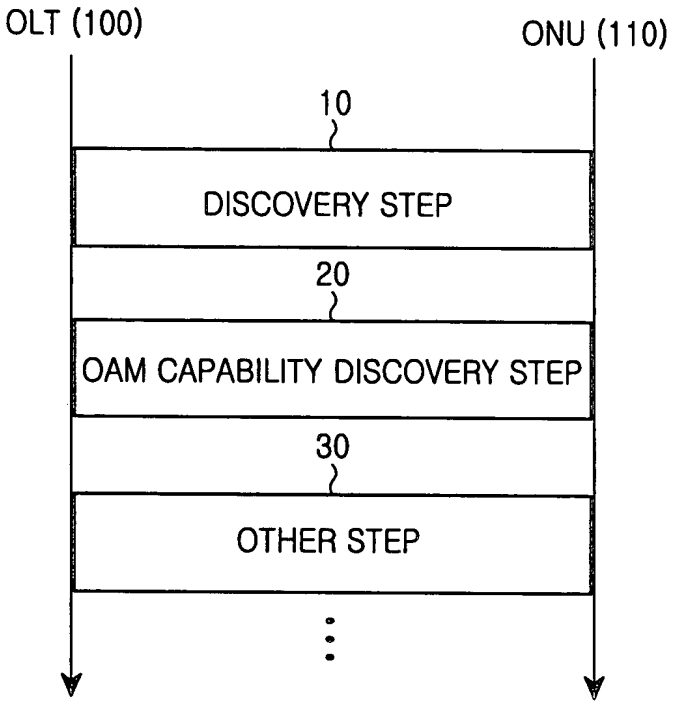
OLT (100)
ONU (110)
10
DISCOVERY STEP
20
OAM CAPABILITY DISCOVERY STEP
30
OTHER STEP

FIG.2

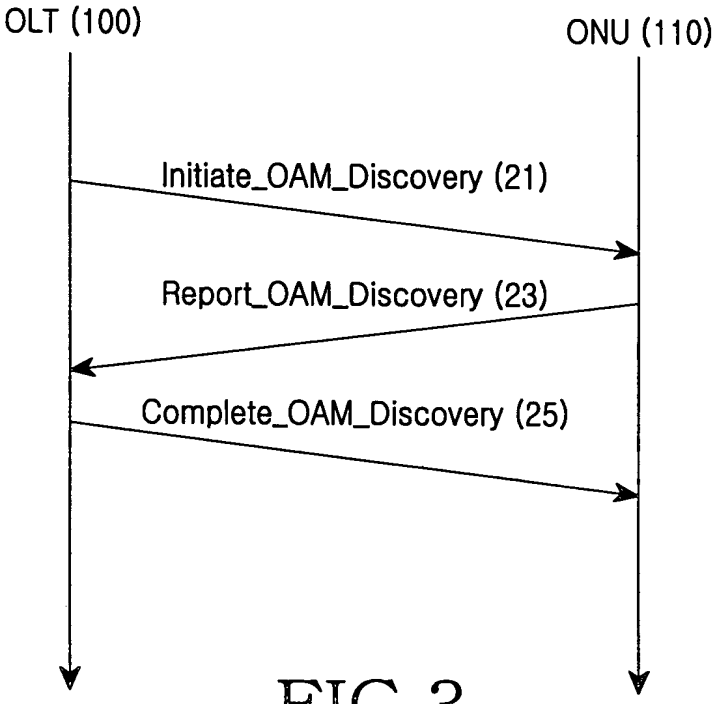
OLT (100)
ONU (110)
Initiate_OAM_Discovery (21)
Report_OAM_Discovery (23)
Complete_OAM_Discovery (25)

FIG.3

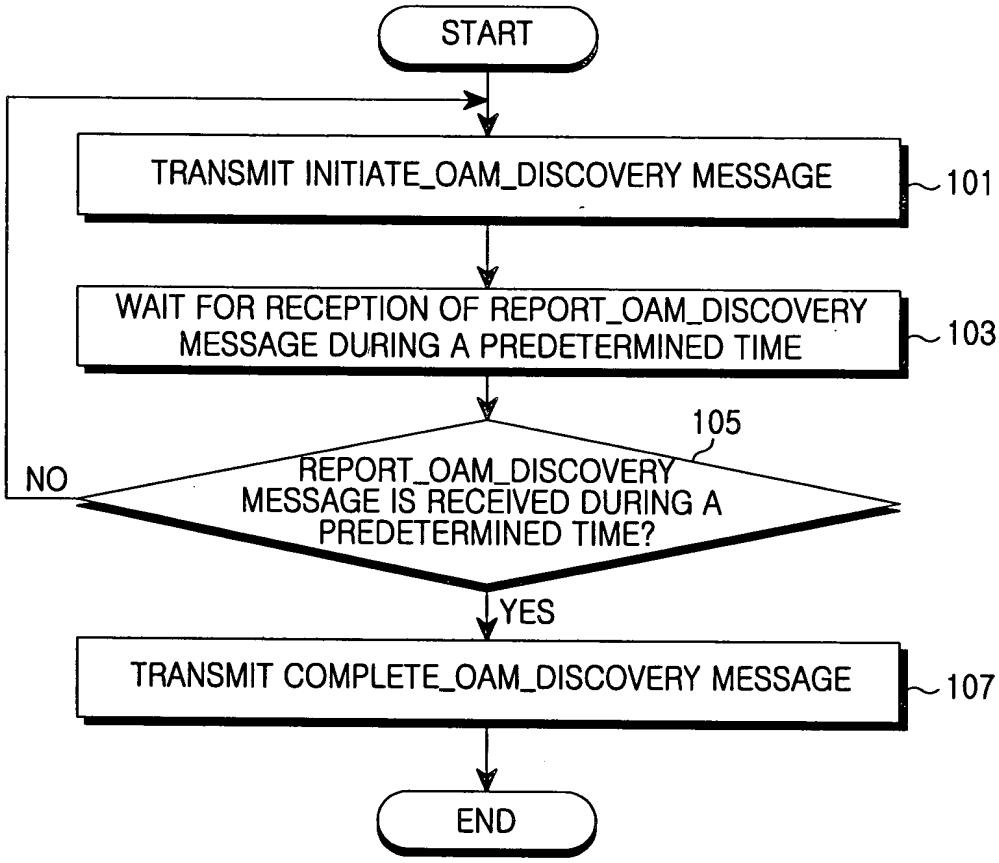
START
TRANSMIT INITIATE_OAM_DISCOVERY MESSAGE
101
WAIT FOR RECEPTION OF REPORT_OAM_DISCOVERY MESSAGE DURING A PREDETERMINED TIME
103
105
REPORT_OAM_DISCOVERY MESSAGE IS RECEIVED DURING A PREDETERMINED TIME?
NO
YES
TRANSMIT COMPLETE_OAM_DISCOVERY MESSAGE
107
END

FIG.4

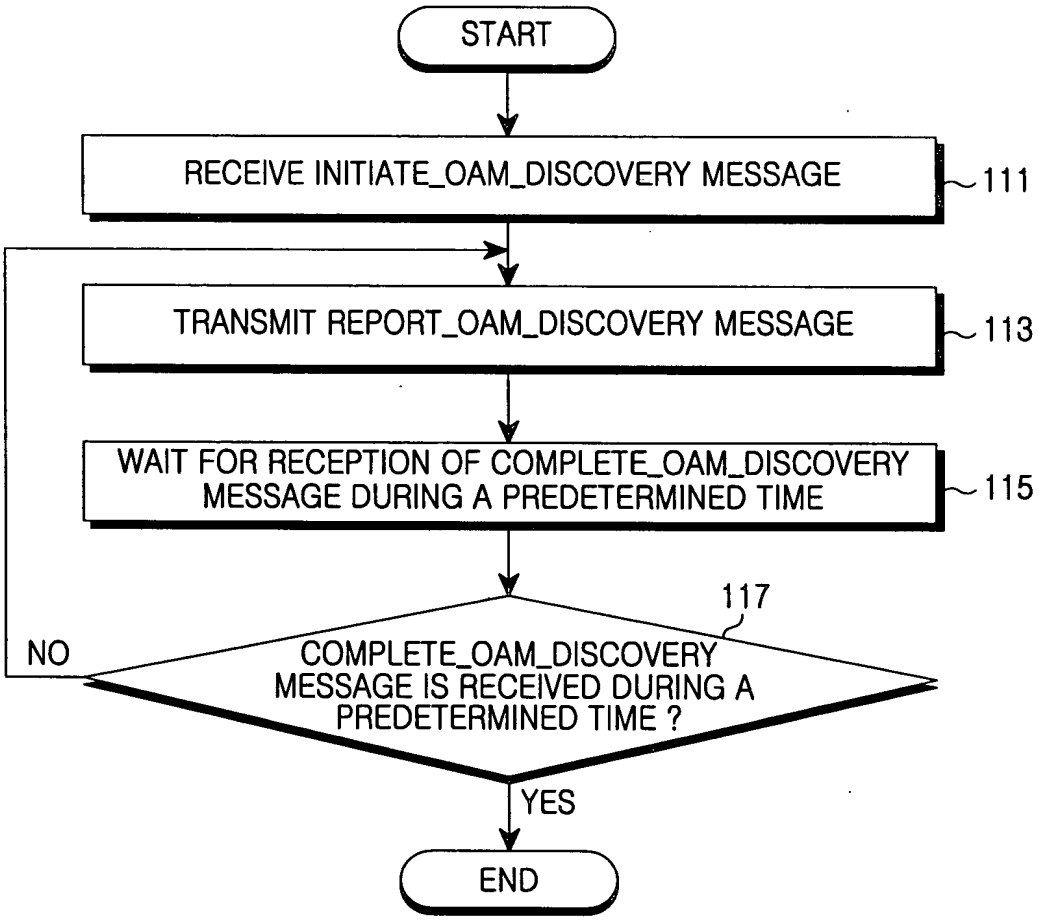
START
RECEIVE INITIATE_OAM_DISCOVERY MESSAGE
111
TRANSMIT REPORT_OAM_DISCOVERY MESSAGE
113
WAIT FOR RECEPTION OF COMPLETE_OAM_DISCOVERY MESSAGE DURING A PREDETERMINED TIME
115
117
NO
COMPLETE_OAM_DISCOVERY MESSAGE IS RECEIVED DURING A PREDETERMINED TIME ?
YES
END

FIG.5

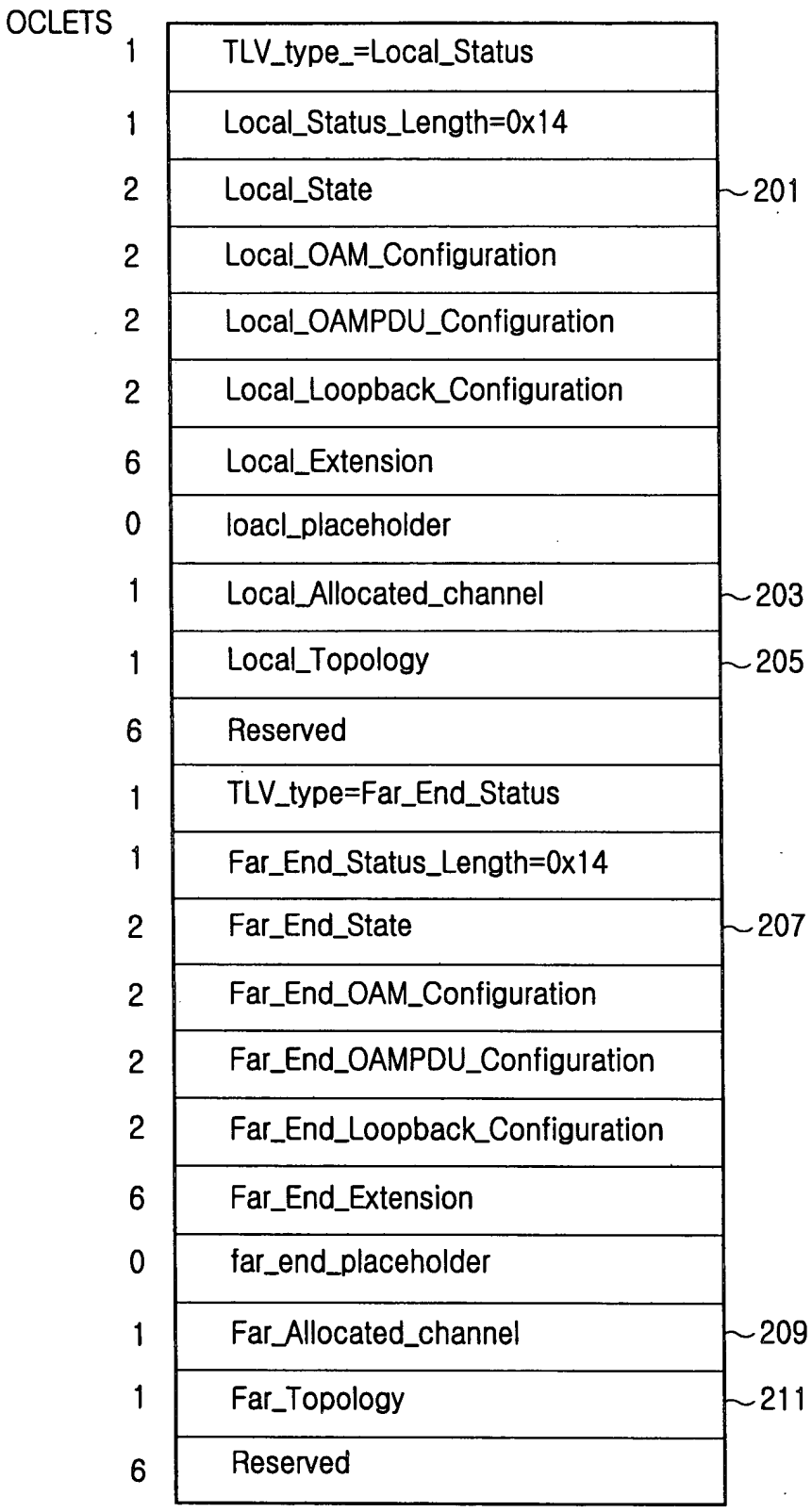
OCLETS
1 TLV_type_=Local_Status
1 Local_Status_Length=0x14
2 Local_State
2 Local_OAM_Configuration
2 Local_OAMPDU_Configuration
2 Local_Loopback_Configuration
6 Local_Extension
0 loacl_placeholder
1 Local_Allocated_channel
1 Local_Topology
6 Reserved
1 TLV_type=Far_End_Status
1 Far_End_Status_Length=0x14
2 Far_End_State
2 Far_End_OAM_Configuration
2 Far_End_OAMPDU_Configuration
2 Far_End_Loopback_Configuration
6 Far_End_Extension
0 far_end_placeholder
1 Far_Allocated_channel
1 Far_Topology
6 Reserved
201
203
205
207
209
211

FIG.6

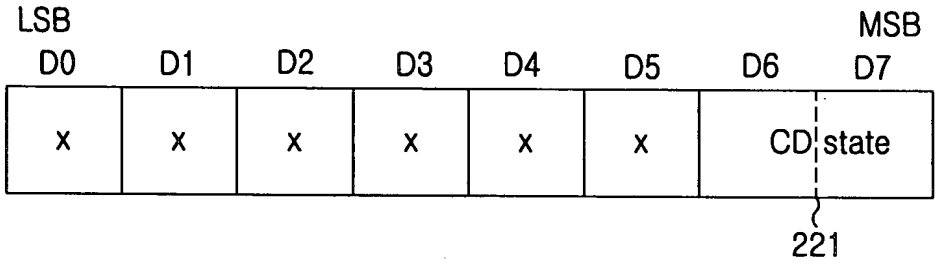

FIG.7

CD state	Message Type
0 0	OAM message[0x00] after OAM Capability Discovery
0 1	Initiate_OAM_Discovery
1 0	Report_OAM_Discovery
1 1	Complete_OAM_Discovery

FIG.8